UNIVERSITY of LOUISVILLE

VICE PRESIDENT FOR BUSINESS AFFAIRS
108 Grawemeyer Hall
University of Louisville
Louisville, Kentucky 40292
Office: 502-852-5143
Fax: 502-852-4337

October 29, 2004

Mr. Arthur L. Williams, Director
Louisville Metro Air Pollution Control District
850 Barrett Avenue, Suite 205
Louisville, Kentucky 40204-1745

Re: University of Louisville Informal Comments Regarding Proposed STAR Program

Dear Mr. Williams:

The University of Louisville appreciates the opportunity to provide the Louisville Metro Air Pollution Control District our informal comments regarding the STAR Program and its accompanying proposed regulatory package, which was publicly released on Sept. 16, 2004.

It is our understanding that, due to the extent and complexity of these proposed regulations, the STAR Program is still in the informal comment period. Since the release, our Department of Environmental Health and Safety has, with the assistance of engineering consultants, performed a preliminary review of the proposed regulatory changes with respect to the specific toxic air contaminant (TAC) emissions from our Belknap Campus. It is our understanding that the Belknap Campus is the only one of our campuses that will be subject to these proposed regulations initially since it is our only Title V or FEDOOP source. Based on both this review and our ongoing discussions with others from the regulated community, we have identified three major issues regarding the proposed regulations and their impact on our Belknap Campus community.

1. **Impact on Research and Teaching Laboratories.** The extremely low quantities of TACs used in our teaching and research labs combined with their infrequent use results in the determination that our laboratories are a truly insignificant source of TACs. Our concern is that the specific exemption currently found in the existing APCD Air Toxics Regulations 5.11 and 5.12 for "laboratory equipment used for chemical or physical analysis or experimentation" has not been incorporated into the proposed regulatory package. Additionally, the exemption from permitting of "Research and Development (R&D) facilities" found in Section 2.3.27 of APCD Regulation 2.02, which has allowed our R&D facilities to be exempt from air permitting, has also not been incorporated into the proposed regulatory package. The lack of such exemptions in the proposed STAR program means that research and teaching operations at the approximately 160 laboratories found at the Belknap Campus would be subject to these complex regulations. As currently written, the STAR program regulations would limit our ability to conduct research and teaching in an effective and timely manner.

It is also our understanding that the introduction of a new chemical or material to any laboratory would make that laboratory subject to screening for all 191 TACs and require a TAC compliance demonstration to be performed for all involved TACs. A formal request to use this new chemical would then have to be prepared and submitted to APCD, with approval required *before* use of the new chemical in that laboratory. This will disrupt and potentially delay new teaching experiments and research projects since research is dynamic in nature. There is no reason to expect that our research and teaching labs have anything but a very low impact on air quality due to the intermittent nature of chemical use in the labs and the small quantities used. The amount (volume) of a volatile chemical that is actually used in a research laboratory setting is an insignificant source of TACs. A key element of the STAR regulation is the assumption that a TAC will be emitted continuously for 24 hours for 70 years which are the assumed exposure scenario parameters to be used for air modeling and risk assessment calculations.

The STAR program, as written, will have the unintended consequence of making it more difficult for the University of Louisville to attract the best and the brightest researchers, who will not want to risk an interruption or postponement of their research activities while awaiting APCD approval to use laboratory quantities of any chemicals new to their research activities. In turn, it could also result in the loss of grant monies due to the APCD approval process for all new chemicals and the delays that could be encountered. Unless there is an exemption for our laboratories under the STAR program, it appears that we will spend considerable effort in people power and expense to gather data to prove that labs are indeed insignificant activities only because we hold a Title V permit for our coal-fired and natural gas boilers.

2. **Insignificant Activities**. The proposed STAR Program does not specifically exclude Title V insignificant activities from its program requirements, and, as such, any and all TAC emissions from such activities will be subject to regulation under the STAR Program's proposed regulations. Per APCD Regulation 2.16, Section 1.22.1.3, insignificant activities include those affected facilities listed as an insignificant activity in the District's federally-approved Title V Permit Program. Per U of L's proposed Title V Operating Permit, these insignificant activities include such far-ranging activities as *all* of our research and teaching laboratories mentioned in Item 1; woodworking equipment, welding equipment and paints used in our art studios; the ventilation systems used by our campus restaurants; our emergency generators; paints used for our maintenance work; our diesel storage tanks; and many other diverse activities. We suggest that APCD incorporate the definition of insignificant activities used in the Title V program into the proposed STAR regulation and exempt those activities from the air toxics program. The STAR program requirements are burdensome and expensive for such insignificant activities with little benefit to be derived for either the university or the public health. In fact, based on discussions with two environmental consulting firms with expertise in air dispersion modeling, we are looking at a cost of possibly over $50,000 just to do initial modeling of approximately 100 emission points in 15 buildings that house laboratory operations, art studios or other maintenance related activities. Unless there is an exemption for insignificant activities (including our labs) under the STAR program, it appears that we will be required to spend considerable effort to gather data to prove that these activities are indeed "insignificant."

3. ***De Minimis* Emission**. The STAR Program contains no *de minimis* exemption figure for individual TAC emissions. Consequently, any TAC emissions, regardless of the quantity, are subject to the STAR Program. This lack of a *de minimis* exemption could have a significant impact on the number of TACs subject to the STAR Program that are emitted from our boilers, ash silo and parts washers. The boilers, ash silo and parts washers are all Title V Emission Points. Inclusion of our laboratories and other Title V insignificant activities significantly increases the number of TACs. For example, all 19 of the 38 Category 1 and Category IA TACs emitted from our two coal-fired boilers and our one gas-fired boiler will be subject to the STAR Program, even though the total calculated 2003 emissions of 18 of the 19 TACs from these three boilers are less than 1 TPY each, and the one remaining TAC had actual combined emissions of less than 3 TPY. In fact several of the TACs had a calculated emission rate of less than one pound per year.

In summary, the University of Louisville is very concerned about the impact the proposed regulations will have on our Belknap Campus, as well as the possibility the proposed requirements could be extended to our other campuses, which are not presently regulated under the Title V or FEDOOP Programs and thus not initially subject to the proposed STAR Program. We believe that by exempting (1) research and teaching laboratories, (2) *de minimis* emissions, and (3) insignificant activities the proposed regulations can still accomplish the goal of safeguarding public health without placing an undue burden on the university's research programs.

We thank you for the opportunity to comment on the proposed STAR Program during the informal comment phase and we look forward to the formal comment period as well. Please let me know if you have any questions.

Sincerely,

Larry L. Owsley
Vice President for Business Affairs

cc: President Ramsey
Provost Willihnganz